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0941.65074

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chikayoshi Kamata  
Serial No.: 09/748,919  
Conf. No.: 5081  
Filed: 12/27/2000  
For: A MAGNETO-RESISTIVE  
MAGNETIC SENSOR...  
Art Unit: 2652  
Examiner: Renner, Craig A.  
Patent: 6,954,341  
Issued: Oct. 11, 2005

*I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.*

22 Feb 06

Date

Registration No. 29,367

Attorney for Applicant

Certificate  
MAR 01 2006  
of Correction

REQUEST FOR CERTIFICATE OF CORRECTION UNDER RULE 322

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
ATTN: Certificate of Corrections Branch

Dear Sir:

In accordance with 37 C.F.R. § 1.322, patentees, through their attorneys, respectfully request that a Certificate of Correction be issued in the above-referenced patent.

The errors occurred as a result of mistakes on the part of the Patent and Trademark Office and the changes include the following:

In the Claims:

Col. 11, line 10, insert --to-- between “response” and “an” (Amend. E, p. 8).

Col. 12, line 12, insert --substantially entirely-- between “is and “interposed”  
(Amend. E, p. 9).

Col. 12, line 12, insert --in an area-- between “interposed” and “between”  
(Amend. E, p. 9).

## REMARKS

A Certificate of Correction incorporating the delineated change is enclosed in duplicate herewith. Since the mistakes were on the part of the Patent and Trademark Office, a Certificate of Correction should be issued without expense to the patentee and such is respectfully requested.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 

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February 22, 2006

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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,954,341  
DATED : Oct. 11, 2005  
INVENTOR(S) : Kamata et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

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Col. 12, line 12, insert --substantially entirely-- between "is and "interposed".

Col. 12, line 12, insert --in an area-- between "interposed" and "between".

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PATENT NO 6,954,341

No. of additional copies 1



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20. (Previously Presented) A magneto-resistive magnetic sensor as claimed in Claim 13, wherein said pair of magnetic regions has a coercive force exceeding a coercive force of a ferromagnetic layer used in said magneto-resistive structure as a free layer.

21. (Previously Presented) A magneto-resistive magnetic sensor as claimed in Claim 20, wherein said magnetic regions are domain-controlling magnetic regions.

22. (Currently Amended) A magneto-resistive magnetic sensor, comprising:

a magneto-resistive structure changing a resistance thereof in response to an external magnetic field,

a cap layer, provided on a top surface of said magneto-resistive structure;

a pair of domain-controlling magnetic regions disposed at both lateral sides of said magneto-resistive structure, said domain-controlling magnetic regions having a magnetization pointing in a common direction;

a pair of electrodes provided on said pair of domain-controlling magnetic regions so as to extend on a top surface of said magneto-resistive structure and so

as to oppose each other across a central part of said magneto-resistive structure, said electrodes having respective overhang parts extending over said magneto-resistive structure so as to oppose each other with a gap therebetween, said pair of electrodes injecting a sensing current into said magneto-resistive structure primarily via said top surface of said magneto-resistive structure,

wherein each of said overhang parts covers said cap layer on said magneto-resistive structure in such a state that an oxidation-resistant conductive layer is substantially entirely interposed in an area between said cap layer and said overhang part, and

said pair of domain-controlling magnetic regions having a coercive force exceeding a coercive force of a ferromagnetic layer used in said magneto-resistive structure as a free layer.